

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An optical module, comprising:

~~an~~ a semiconductor optical device;

a stem made of a first material for providing the semiconductor optical device;

a plurality of lead terminals extending along a predetermined axis from the stem, the lead terminals transmitting signals between the semiconductor optical device and an electronic circuit;

a substrate for providing ~~an~~ the electronic circuit thereon; and

a base made of a second material different from the first material for mounting the substrate, the base being in direct contact with the stem,

wherein the base extends along the predetermined axis from the stem and the lead terminals are electrically and directly connected to the electronic circuit provided on the substrate.

Claim 2. (Cancelled).

3. (Currently Amended) The optical module according to claim 1 ~~2~~, wherein the base has an edge portion ~~adjacent to~~ in direct contact with the stem, ~~the second material of~~ and the edge portion ~~of the base containing~~ contains the first material ~~of the stem~~.

4. (Currently Amended) The optical module according to claim 3, wherein a ~~ratio~~ content of the first material ~~to the second material~~ in the edge portion ~~of the base~~ gradually decreases from the stem to a ~~point~~ position apart from the stem.

5. (Original) The optical module according to claim 3, wherein at least edge portion is formed by the sintering.

6. (Original) The optical module according to claim 1, wherein the stem and the base are made of the same material and are formed in unity.

Claim 7. (Cancelled).

8. (Original) The optical module according to claim 1, wherein the semiconductor optical device is a semiconductor laser diode.

9. (Original) The optical module according to claim 1, wherein the semiconductor optical device is a photo diode.

10. (Original) The optical module according to claim 1, wherein the semiconductor optical device is a semiconductor laser diode and a photo diode, the optical module constituting an optical transceiver.

11. (New) A light-emitting module, comprising:
a light-emitting device;
a substrate for installing an electronic circuit; and

a package including a primary portion and a base, the primary portion having a stem made of first material, a casing, and a plurality of lead terminals extending from the stem to connect the light-emitting device in electrical contact with the electronic circuit on the substrate, the stem installing the light-emitting device thereon, the casing enclosing the light-emitting device therein co-operating with the stem, and the base installing the substrate thereon,

wherein the base is made of second material and is in direct contact with the stem.

12. (New) The light-emitting module according to claim 11,
wherein the primary portion forms a can-package with the casing having a cylindrical shape.

13. (New) The light-emitting module according to claim 11,
wherein the base has an edge portion in contact with the stem, the edge portion containing the first material.

14. New) The light-emitting module according to claim 13,
wherein a content of the first material in the edge portion gradually decreases from the stem to a position apart from the stem.

15. (New) The light-emitting module according to claim 13,
wherein the base is formed by the sintering.

16. (New) The light-emitting module according to claim 11,
wherein the first material is CuW.
17. (New) The light-emitting module according to claim 11,
wherein the second material is aluminum (Al).
18. (New) The light-emitting module according to claim 11,
wherein the second material is copper (Cu).
19. (New) A light-emitting module, comprising:
a semiconductor laser diode; and
a package including a primary portion and a base, the primary portion having a stem
made of first material and a casing, the stem installing the laser diode thereon, the casing
enclosing the light-emitting device thereon co-operating with the stem, and the base being made
of second material,
wherein the stem and the base are integrally formed by sintering.
20. (New) The light-emitting module according to claim 19,
wherein the primary portion of the package forms a can-package with the casing having a
cylindrical shape and the stem having a disk shape.